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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,090	06/26/2003	Wayne Lawrence Felts	STL11280	4245

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EXAMINER	
COTTINGHAM, JOHN R	

ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/606,090	FELTS, WAYNE LAWRENCE	
	Examiner	Art Unit	
	John R. Cottingham	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/26/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1- are rejected under 35 U.S.C. 102(e) as being anticipated by Fortin et al. U.S. Patent Application Publication 2004/0003223. Fortin et al. shows all of the claimed subject matter of a method and apparatus in Figures 1-6.

Regarding claim 1, a method, comprising: controlling an electrical load (on the hard drive 141) with a first code executed by a processor; releasing processor control so that the electrical load operates in an open control mode while the first code is displaced with a second code; an reinstating processor control of the electrical load using the second code. [0040] (it is inherent that the processor does not control the harddrive during spin up while it is executing code from the ROM).

Regarding claim 2, wherein the first code of the controlling step is supplied from a boot read only memory (ROM). [0024]

Regarding claim 3, wherein the controlling step comprises loading the first code into a first memory location accessed by the processor. [0040]

Regarding claim 4, wherein the controlling step further comprises loading the second code into a second memory location accessible by the processor. [0040]

Regarding claim 5, wherein the releasing step comprises moving the second code from the second primary location into the first memory location, thereby displacing the first code from the first memory location. [0040]

Regarding claim 6, wherein the electrical load is a motor. (it is inherent that hard drives use electric motors drawing electrical loads while in use)

Regarding claim 8, wherein the motor supports a data storage medium, and wherein the controlling step comprises using the motor to rotate the data storage medium at an operational velocity and retrieving the second code from the rotating data storage medium. [0040]

Regarding claim 8, comprising: using a processor 120 to execute startup code loaded into a memory location to initiate operational control of an electrical load; tinuing to operate the electrical load while processor operational control of the electrical load is temporarily suspended to allow replacement of the startup code with application code in the memory location; and resuming operational control of the electrical load using the application code. [0040]

Regarding claim 9, wherein the startup code of the using step is supplied from a boot read only memory (ROM). [0024]

Regarding claim 10, wherein the memory location of the using i characterized as a unit memory location, and wherein the using step further steps comprises loading the application code into a second memory location accessible by the processor. [0040]

Regarding claim 11, wherein the continuing step comprises , moving the application code from the second memory location into the first memory location, thereby displacing the startup code from the first memory location. [0040]

Regarding claim 12, wherein the electrical load comprises a motor supporting a data storage medium 141, and wherein the using step comprises energizing the motor to rotate the data storage medium at an operational velocity and retrieving the application code from the rotating data storage medium. (see Fig. 6)

Regarding claim 13, wherein the using step further comprises using the startup code to energize an actuator motor to bring a data transducing head into alignment with a track defined on the data storage medium, and utilizing the head to transduce the application data from said track. (this is inherent to hard drives)

Regarding claim 14, an apparatus, comprising: an electrical load (from the hard drive); a memory location 140; and a programmable processor 120 coupled to the memory location and adapted to control the electrical load, wherein during an initialization process the processor executes startup code loaded into the memory location to initiate operational control of the load, temporarily releases operational control of the electrical load so that the electrical load continues to operate in an open control mode while the startup code in the memory location is displaced with application code, and resumes operational control of the electrical load using the application code. [0040] (it is inherent here that the processor is not in control over the hard drive while it is in the spin up mode)

Regarding claim 15, further comprising a boot read only memory (ROM) which stores the startup code, wherein the startup code is loaded / from the boot ROM to the memory location for execution by the processor. [0024]

Regarding claim 16, wherein the memory location of the using step is characterized as a first memory location, and wherein the apparatus further comprises a second memory location accessible by the processor and into which the processor loads the application code.

Regarding claim 17, wherein the electrical load comprises a motor supporting a data storage medium, and wherein the execution of the startup code by the processor results in the energizing of the motor to rotate the data storage medium at an operational velocity. [0040]

Regarding claim 18, further comprising an actuator motor coupled to a data transducing head, and wherein the execution of the startup code by the processor further results in the energizing of the actuator motor to bring the head into alignment with a track defined on the data storage medium, the head transducing the application data from said track. (this is inherent to hard drives accessing data)

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cagle et al. U.S. Patent Application Publication 2004/0078679 shows a similar invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (571) 272-7079. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571)272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John R. Cottingham
Primary Examiner
Art Unit 2116

jrc